

REMARKS

Responsive to the outstanding Office Action, applicant has carefully studied the Examiner's rejections. In the amendment, claim 37 has been amended and claim 54 was canceled. Support for the amendment to claim 37 can be found, at least, in previously pending claim 54, and also in the last section of page 8 through the first section of page 9, and the last section of page 10 through the first section of page 11, of the application as filed. Support can further be found, at least, in Figures 1 and 2 of the application as filed. It is respectfully submitted that no new matter was added with these amendments. Favorable reconsideration of the application in light of the following amendments and detailed arguments is respectfully requested.

REJECTIONS UNDER 35 USC 102

Claims 37-39, 41-43, 45, 46, 54, 56-68, 60, 61 and 71 have been rejected under 35 USC 102(e) as being anticipated by Zimmermann (US 2004/0058222A1).

Zimmermann shows two adjacently disposed chambers, wherein the chambers are connected via a membrane. A first chamber 12 is filled with concentrated fuel (methanol) 22, and the second chamber 14 contains a mixture of fuel and water 24. Consequently, Zimmermann does not disclose designing the "chamber" which contains the mixture of fuel and water as a throughflow device, which is disposed in the interior of

the other "chamber" (fuel storage device or tank, respectively). There is also no suggestion of this assembly from the Zimmermann document. The whole construction disclosed in Zimmermann (compare for example (0027)), which shows empty spaces above the methanol 22 or the methanol/water mixture 24, (compare the reference signs 23 and 25,) does not allow to guide one of the "chambers" in the interior of the other chamber. Consequently, the design of one of the fluid containing elements as an element which is arranged as a throughflow device in the interior of another element (i.e. as a channel or the like) is also not taught or suggested for one skilled based on Zimmermann when considering the ordinary skills of the one skilled.

Amended claim 37 further defines the present invention, in that in contrast to what is shown in Zimmermann; (see Fig. 1 and the corresponding description sections therein), the present invention provides throughflow device in form of a channel with permeable or semi-permeable membrane walls which are arranged inside and at a distance from the walls of the surrounding fuel storage device in which the fuel is stored. It is respectfully submitted that the present invention as defined in claim 37 is neither shown nor taught by Zimmerman nor any of the further references applied.

Beyond this, it can be seen that the present invention's alternative solution does not only allow a simple and reliable system for increasing the fuel concentration, but also provides, as an advantage which is not provided by Zimmerman due to the completely different shape and arrangement of the fuel *delivery* subsystem 10, its fuel reservoir 14 and its parts 18 and 20, a system in which the methanol concentration increases can be controlled with high accuracy due to the simple geometric properties

(especially the flow velocity of the laminar flow and the length of the channel in the filled tank, compare last sentence of the description). In other words: Only the provision of a defined throughflow channel inside the fuel storage device and at a distance from the walls of this device allows the adjustment and the control of a desired concentration gradient as is shown in Fig. 2 of the present invention. The device according to new claim 1 especially also has the advantage that the concentration change is independent of the throughflow velocity.

This should also be clear from the fact that in all embodiments described in Zimmermann, in each case three essential elements are present: two (adjacent) chambers and a membrane separating these two chambers from each other. In contrast to this, the present invention only needs two essential elements: the outer chamber or the fuel tank, respectively, and the inner "chamber" or conduit, respectively, which is designed as a conduit comprising a membrane wall.

This distinction is made even more clear by the changes to claim 37 herein, wherein claim 37 defines (based on page 8, line 3 and lines 15 to 17 and page 12, lines 10 to 11), more clearly that the throughflow device is disposed in the interior of the fuel storage device and explicitly states that the concentration of the fuel in said mixture is increased on its path through the throughflow device.

In view of the above it is respectfully submitted that claim 37 distinguished over Zimmermann in regard to 35 USC 102. Reconsideration and withdrawal of this rejection are therefore respectfully requested. The remaining claims rejected under this heading

depend from what is believed to be an allowable claim 37, as discussed above, and are therefore believed to be allowable over this reference as well.

REJECTIONS UNDER 35 USC 103

Claims 44, 47, 48, 51, 52, 55 and 72 have been rejected under 35 USC 103 as being unpatentable over Zimmermann.

Claim 40 has been rejected under 35 USC 103 as being unpatentable over Zimmermann and further in view of US 2002/0076599 to Neutzler.

Claims 49 and 53 have been rejected under 35 USC 103 as being unpatentable over Zimmermann and further in view of Beisswenger (US 2004/0003720).

Claims 50 and 59 have been rejected under 35 USC 103 as being unpatentable over Zimmermann and further in view of Shurtleff (US 2003/0228252).

Each of the claims rejected herein depend, directly or indirectly, from what is believed to be an allowable claim 37 for the reasons given above, and are believed to be allowable based, at least, upon this dependence. However, for the following reasons it is believed that these claims further distinguish over the art of record.

The secondary references cited by the Examiner (US 2002/0076599 "Neutzler", US 2004/0003720 11Beisswengerlt and D4), do not suggest the design of one "chamber" as a throughflow device which is arranged in the interior of a fuel storage chamber.

Amended claim 37 (based on page 8, line 3 and lines 15 to 17 and page 12, lines 10 to 11), states more clearly that the throughflow device is disposed in the interior of

the fuel storage device and explicitly defines that the concentration of the fuel in the mixture is increased on its path through the throughflow device. It is respectfully submitted that neither the primary reference, nor none of the secondary references cited by the Examiner discloses this feature. Therefore, no reasonable combination of the applied references teaches or suggests the invention as claimed. On this basis it is submitted that the present invention further defines over each of the combinations cited by the Examiner.

In view of the above, reconsideration and withdrawal of the rejections under 35 USC 103 are respectfully requested.

SUMMARY

The remaining claims on file are thus believed to be allowable. It is therefore submitted that the application is now in condition for allowance, and action towards that end is respectfully requested.

If the Examiner wishes to modify any of the language of the claims in an effort to move the application towards allowance, a telephone call to the undersigned would be greatly appreciated.

Respectfully submitted,

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